



UNESCO INSTITUTE *for* STATISTICS

## MEDIUM-TERM STRATEGY 2008 – 2013



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**UNESCO Institute for Statistics**

P.O. Box 6128, Succursale Centre-Ville  
Montreal, Quebec H3C 3J7  
Canada

Tel: (1 514) 343-6880

Fax: (1 514) 343-5740

Email: [information@uis.unesco.org](mailto:information@uis.unesco.org)

<http://www.uis.unesco.org>

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# **MEDIUM-TERM STRATEGY**

2008 – 2013

# Foreword

It is an honour to present the second Medium-Term Strategy of the UNESCO Institute for Statistics (UIS). The Strategy highlights the critical role of statistics to inform sound policies and the need for accountability and transparency to enable citizens to play an active role in shaping their societies. UNESCO has recognized this in the creation of the UIS in 1999 and in continued support to its programmes.

The challenge has been to build strong foundations to enable the Institute to provide high-quality statistical services in all areas of UNESCO's competence – education, science and technology, social sciences, culture and communication. Despite the implicit risks, many of these expectations have been fulfilled and much has been achieved through staff dedication. This was reflected by the recent external evaluation of the work of the UIS.

It is now time for the Institute to consolidate the gains and reassess its strategic position and objectives. We must continue to take a measured and systematic approach to the UIS' programme and the move towards a more integrated structure. A fresh look at the Institute's Medium-Term Strategy is opportune in this regard.

I wish to take this opportunity to express my gratitude to the Chairperson of the UIS Governing Board, Ms Heli Jeskanen-Sundström, to the Board members, to the UIS staff and to many UNESCO colleagues who have provided valuable advice in the strengthening of the Institute and the formulation of this strategy.

A handwritten signature in blue ink, appearing to read 'Hendrik van der Pol', written over a light blue circular stamp.

Hendrik van der Pol  
Director  
UNESCO Institute for Statistics

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## International statistics in a changing world

This is the second Medium-Term Strategy for the UIS.<sup>1</sup> In the ten years since its creation, the Institute has achieved a great deal and seen many changes in international statistics. World summits on Education for All (EFA), the Millennium Development Goals (MDGs), sustainable development and the information society have set new international goals. The Institute has rapidly built a strong reputation in education statistics and has undertaken new initiatives in other sectors of UNESCO's mandate.

The four Main Lines of Action (MLAs) and the priorities established in this strategy are all focused on improving international statistics in UNESCO's areas of competence, as well as serving the needs of Member States by providing guidance and

support to national statistical offices. The demand for high-quality statistics at the international level to monitor development, and at the national level to support benchmarking and evidence-based policy, has increased markedly since the creation of the UIS. In response, the Institute will concentrate on improving the diverse aspects of data quality, while expanding the range and coverage of statistics on learning outcomes and within the broader fields of science, culture and communication.

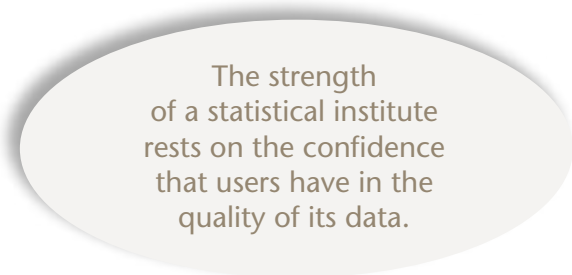
The UIS has several major vehicles for delivering its education data, namely through the *EFA Global Monitoring Report*, *World Development Report* (and *World Development Indicators* database) of the World Bank, UNDP's *Human Development Report*, UNICEF's *State of the World's Children* and others. International education policy has begun to reach beyond the priority of basic education to examine the contribution of secondary and higher education to development. The focus on higher education also extends to the fields of science and research, where there is growing interest in how new technologies can address developmental

Since 2001, the *EFA Global Monitoring Report*, the *World Bank's World Development Report*, UNDP's *Human Development Report* and UNICEF's *State of the World's Children* continue to be important vehicles for delivering UIS education data.

<sup>1</sup> For the first Medium-Term Strategy, see UIS (2001). *Medium Term Strategy 2002-2007*.

issues. The UIS will need to respond to these trends by refining existing and developing new comparative frameworks and indicator methodologies in order to better monitor and inform policy for post-basic education programmes.

International and national policy-makers are increasingly interested in the broad areas of learning outcomes. In the past, there was a general focus on the inputs into education systems, such as the number of qualified teachers or the facilities available in schools. Today, policy-makers are seeking critical measures for the quality and equity of education systems, for example. Learning outcomes can also reflect the potential human capital for development, as well as the returns to investments in education. The UIS has begun to respond to this challenge but will reinforce these efforts considerably. In the next six years, the international measurement of learning outcomes will be a major priority. There is a global market emerging for the highly educated which has stimulated greater demand for measures of international mobility. This also relates to 'knowledge societies', which constitute another



The strength of a statistical institute rests on the confidence that users have in the quality of its data.

priority for UNESCO. In support of this, the UIS will continue to promote the measurement of mobility and the transmission of knowledge through old and new technologies.

The strength of a statistical institute rests on the confidence that users have in the quality of its data. In all areas of activity, the UIS will strive to improve the quality of data and to present them in products that can be used readily and understood by both non-specialists and national institutions. Developments in statistical tools, data standards and improved coordination among international agencies are all promising ways in which data can become more relevant, timely, comparable and consistent.

## UNESCO priorities

The UIS strives to serve UNESCO's overarching and strategic programme objectives.

<b>UNESCO MISSION STATEMENT</b>				
As a specialized agency of the United Nations, UNESCO contributes to the building of peace, the alleviation of poverty, sustainable development and intercultural dialogue through education, sciences, culture, communication and information.				
<b>Overarching objectives</b>				
<b>Attaining quality education for all</b>	<b>Mobilizing science knowledge and policy for sustainable development</b>	<b>Addressing emerging ethical challenges</b>	<b>Fostering cultural diversity and intercultural dialogue</b>	<b>Building inclusive knowledge societies through information and communication</b>
<b>Strategic programme objectives</b>				
<ul style="list-style-type: none"> <li>- Strengthening UNESCO's global lead and coordination role for EFA and providing support to national leadership in favour of EFA.</li> <li>- Fostering quality education for all from access to success in pursuit of sustainable development.</li> </ul>	<ul style="list-style-type: none"> <li>- Leveraging scientific knowledge for the benefit of the environment and the management of natural resources.</li> <li>- Fostering policies and capacity-building in science, technology and innovation, with special emphasis on the basic sciences and energy.</li> <li>- Contributing to disaster preparedness and mitigation.</li> </ul>	<ul style="list-style-type: none"> <li>- Promoting principles, practices and ethical norms relevant for scientific and technological development.</li> <li>- Enhancing research-policy linkages on social transformations in order to contribute to human well-being and greater equality.</li> <li>- Monitoring critical emerging ethical and societal issues.</li> </ul>	<ul style="list-style-type: none"> <li>- Strengthening the contribution of culture to sustainable development.</li> <li>- Demonstrating the importance of exchange and dialogue among cultures to social cohesion, reconciliation and peace.</li> <li>- Sustainably protecting and enhancing cultural heritage.</li> </ul>	<ul style="list-style-type: none"> <li>- Enhancing universal access to information and knowledge.</li> <li>- Fostering pluralistic, free and independent media and info structures.</li> </ul>
<b>Cross-cutting objective</b>				
Support to countries in post-conflict and disaster situations in UNESCO's domains				
<b>UNESCO priorities</b>				
1. Africa    2. Gender equality				



# The UIS mission

Within the broad framework of UNESCO strategies, the UIS was established in order to foster a culture of evidence-based policy, both nationally and internationally, through the collection and use of high-quality, timely data in education, science and technology, culture and communication.

The mission of the Institute was elaborated in its Statutes, taking into consideration UNESCO's general mandate to contribute to the advancement and sharing of knowledge and the free flow of ideas. The role of the UIS is to provide statistical information to Member States and international organizations in order to inform decision-making and facilitate democratic debate in UNESCO's areas of competence. To this end, the Institute deploys the highest professional standards and intellectual independence in data collection and analysis. In order to successfully accomplish this mission, it is necessary for the UIS to ensure the convergence

of the following four main action areas: i) the collection and maintenance of international statistics which reflect changing policy and are reliable, internationally comparable and robust, as well as feasible to collect; ii) the production and implementation of new statistical standards, classifications, methodologies, indicators and related documentation; iii) the development of the statistical and analytical capacities of Member States; and iv) the provision of analytical services within the context of the Institute's mission.

According to its Statutes, the UIS should serve the needs of Member States and UNESCO through its core work programme, while being responsive to emerging needs of other national and international organizations when additional financing is available. To this end, the UIS will further develop its partnership arrangements with national, sub-regional and regional institutions and international organizations within and outside the United Nations system. In conformity with the priorities of UNESCO, the UIS will take into account the requirements of UNESCO's Member States in matters pertaining to statistics, particularly for sub-Saharan Africa, gender equality, as well as targeted intervention for youth, the least-developed countries and small island states. It will also focus on major themes which are closely related to the Medium-Term Strategy of UNESCO.

“UNESCO will help to assist Member States in the formulation of evidence-based policies – nationally, regionally and internationally – based on credible information through the collection and use of data in all its fields of competence with the UNESCO Institute for Statistics (UIS) as the focal point.”

### *Main programmatic lines of actions*

The UIS will achieve its mission through four main programmatic lines of action (described below). In pursuing these activities, it will seek to involve closely producers and users of statistics to determine policy information needs and programme priorities, as well as to develop and implement these work areas. Emphasis will be given to establishing networks of countries and experts for each statistical and policy information area within UNESCO's fields of competence to assist the UIS in sharing experiences, good practice, statistical methodologies and data. This will help to improve the international comparability, reliability and validity of the resulting statistics and indicators. Close relationships with data producers and users in the countries will be maintained to ensure that the work programme of the UIS is responsive to current and emerging policy information needs and takes full account of existing country situations and capacities.

### **Main programmatic line of action 1: Guardianship of cross-national data**

There is an urgent need to improve the quality of cross-national statistics that are used to monitor international goals and meet changing policy demands. This is a key priority for the UIS during the 2008-2013 period.

The UIS will consult widely within UNESCO and with other users of cross-national statistics to ensure that it collects regularly the key data required.

### *Partnership and cooperation*

The UIS will consult widely within UNESCO and with other users of cross-national statistics (UN and other international agencies, national policy-makers, researchers and NGOs) to ensure that it collects regularly the key data needed to understand changes in UNESCO's areas of responsibility and, in particular, to monitor progress towards internationally-agreed goals. More intensive relations will be developed with national statisticians and policy-makers in cooperation with the UNESCO Field Offices in order to inform and consult them about new policy needs, statistical standards, methodologies and best practices. This will also assist them to respond better to UIS statistical enquiries.

Through the UIS Regional Advisors, strategic partnerships will be created with national

authorities responsible for data collection to ensure that they are able to produce high-quality data for national and international reporting. The UIS regional network will be strengthened in order to play this role more effectively. Networks of national statisticians working on similar issues will be supported by UIS staff so that relevant experiences may be shared. Many of the UIS activities will be carried out in close liaison with UNESCO Regional Bureaux and will take advantage of existing regional groupings and networks.

#### *Reviewing data sources and quality*

New international statistical surveys in UNESCO's fields of action will be designed and carried out to collect more policy-relevant data, while improving their quality and accompanying contextual information.

Greater exploitation of relevant data from secondary sources will be undertaken in order to avoid duplication of data collection, to add rich new dimensions to existing data and, through the process of triangulation, to improve data coverage and quality. Similarly, data collection through channels – such as demographic censuses and surveys – will be expanded in cooperation with Member States and relevant agencies.

Data quality assurance procedures within the UIS will be enhanced and incorporated into the regular processing operations, including those for metadata. In addition, good practice guidelines will be prepared to ensure the transparency of quality processes.

The UIS will play a strong role within the international network of data-producing agencies through the UN Statistical Commission and relevant Administrative Committee on Coordination (ACC) bodies in order to help eliminate the duplication of data collection and to coordinate areas of UNESCO's mandate within the international statistical system. The Institute will serve as a focal point within UNESCO for statistical data collection and for communicating UNESCO's statistical requirements to other agencies in the international forum.

#### *Access to data and metadata*

Data dissemination utilizing the Internet and other electronic means will be expanded as appropriate. The aim is to provide wider access to cross-national data. The contents, functions and user interface of the UIS statistical database will be upgraded to improve on-line access and data dissemination. In parallel, the UIS will ensure that users without access to electronic facilities will be able to consult data.

Data quality is a critical and multifaceted concern. Indeed, there are many different aspects of data quality which must be addressed for effective policy-making. Therefore, the UIS will adopt a comprehensive policy of improvement related to the requirements of various data users and programmes. Improving the timeliness of outputs is critical for education statistics. One of the principal obstacles to this has been linked to work cycles that are governed by major data release dates. Indicator verification and estimation of data are organized according to specific releases,

independent of when data are received. Therefore, the UIS will introduce the concept of a rolling data collection and release system for education which will provide a strong internal incentive for reducing the processing time. This will also capitalize on the potential of some countries to release their data sooner than in the past.

For data collections in the areas of science, communication and culture, improved data quality is related more to the development of standards, their application within countries, as well as the construction and dissemination of policy-relevant indicators. While definitions have been well established for much of the print and broadcast media statistics, the UIS will concentrate on defining on-line media services – an area which has shifted the focus away from print media. The UIS is committed to monitoring this trend to help policy-makers ensure that public information continues to be made available to citizens in all communities.

Data quality is of utmost importance and the UIS will adopt a comprehensive policy for improvement.



### *Expected results*

- Improved UNESCO statistical database in terms of data content and quality, together with appropriate metadata and better user access and utilization of the data, both current and historical, to inform policy-making and evaluation.
- Improved communication and collaboration with, and among, data producers and users in Member States and partner agencies through the formation of networks (or reliance on those existing), the organization of regular regional workshops, increased use of ICTs and enhanced methods of consultation.
- Greater relevance of information to support policy and decision-making through the development of new international statistical surveys using improved data instruments and methodology in order to gather more complete, timely and reliable data in UNESCO's fields of competence.
- Better coordination and complementarity with other international organizations and statistical agencies in international data collection and dissemination in order to strengthen the overall statistical supply.
- Publication of metadata and quality standards in order to better inform Member States, international organizations and other clients of UIS methods for data compilation.
- Stronger partnerships with other agencies, national networks, NGOs, researchers and civil society to facilitate the sharing of statistics, indicators, good practices and related information.
- Faster submission of data due to standardized survey designs, clearer definitions and a user-friendly interface for questionnaires, as well as a rolling data collection and release system.
- Implementation of regular data collection in the fields of culture and the use of ICTs in education.
- More complete and high-quality data submissions to UIS for international monitoring and reporting.

## Main programmatic line of action 2: Development of appropriate methodologies and standards

It is essential to ensure that data collected nationally and internationally are based on sound methodology and standards. The UIS has a duty to provide guidance to Member States on how to monitor the areas of UNESCO's mandate, through international standards based on best practice. The Institute must also use the latest statistical techniques and methodologies, while helping Member States to adopt best practice, for example, in methodologies for measuring literacy or learning achievement.

### *International standards*

Clear, well-defined standards form the framework for comparability of data in the national and international statistical fora. The UIS has the mandate to establish these quality standards. This also entails ensuring that the data submitted to the Institute adhere to set international definitions and are classified in a systematic fashion.

The UIS has a duty to provide guidance in monitoring the areas of UNESCO's mandate using international standards on definitions and indicators.

The UIS will strengthen the application of standards for international data collection in education, science, culture and communication. Further guidance will be issued to Member States to raise awareness and improve their understanding of current standards. The UIS will provide training on international data quality through regional workshops and missions to key countries. It will also strengthen and broaden the existing 1997 *International Standard Classification of Education (ISCED)*, notably through guidelines on implementation that will allow more precise comparison of education programmes.

Input from the Organisation for Economic Co-operation and Development (OECD), Eurostat and other international partners will be sought to ensure the widest coverage of statistical standards and their consistent application in all countries of the world. Dialogue with countries and organizations on the application of current statistical standards will assist the UIS to understand country-level issues and improve the international classification system.

Implementation will also be a key target of classification work in science and technology. The UIS will undertake a more detailed review of how the OECD manuals on R&D (*Frascati*) and innovation (*Oslo*) are being applied in developing countries. The aim is to improve the comparability of their science data by introducing appropriate principles for the adaptation of OECD standards.

The UIS will work towards a revised *UNESCO Framework for Cultural Statistics*. This will present an overall model for the production of internationally comparable statistics on culture, incorporating the views of Member States, international organizations and other agencies representing various sectoral interests. The revised standard will support UNESCO's policy development on cultural diversity and heritage, while guiding Member States on how culture can be linked to development goals. The standard will have due regard to various national approaches to culture, allowing flexibility in its application.

New standards will also be introduced to cover information literacy and digital media<sup>2</sup> in support of UNESCO's Information for All programme and the follow-up to the World Summit on the Information Society. This will require the establishment of new definitions in consultation with experts and Member States.

Attention will be given to ensuring that UNESCO standards are incorporated into other international initiatives. This will occur notably by contributing to the revision of international standards under the responsibility of the United Nations Statistical Division (UNSD), International Labour Organisation (ILO), International Organization for Standardization (ISO) and other agencies.

This approach will lead to a more consistent set of UNESCO standards which are fully integrated in the international statistical forum.

### *Methodological development*

Data should be collected and analysed using advanced statistical techniques. The UIS will continue to develop its methodological projects on learning outcomes: the Literacy Assessment and Monitoring Programme (LAMP) and Assessment of Learning Outcomes (ALO). In the case of ALO, the UIS will build upon current best practices and international partnerships for a more coordinated approach to international assessment in the classroom.

In reference to LAMP, it should be stressed that this programme is the main UIS priority for measuring adult literacy and exemplifies the need to adjust methodologies in order to reflect changes in policy agendas. LAMP is designed to respond to a broad contextual definition of literacy, which places these skills within a continuum. It involves a new psychometric assessment of literacy components, such as the ability to recognize a single letter or to pronounce a syllable. During the period 2008-2013, the UIS will seek to build on the experiences of pilot countries to expand the project to more countries and transform LAMP into a thoroughly tested global standard used in international reporting.

<sup>2</sup> This includes services such as on-line newspapers and radio.

In addition to the use of up-to-date methodology in the field, it is also important that internal processes meet rigorous standards. Thus, methodological work will also include procedures to impute missing data and make projections. Internal statistical and technical methods for data processing, analysis and dissemination will be evaluated in order to develop a plan of action for their updating. As methods are reviewed, they will be fully documented for reasons of quality assurance and transparency.

The availability of resources at UNESCO and the statistical capacity of national agencies will mean that the UIS will always have to prioritize demand for new statistics and surveys. The Institute will mobilize support and expert input from interested countries, agencies and institutions in developing, pilot-testing, disseminating and implementing new methodologies. This process will also ensure that new methodologies meet the needs of both international partners and Member States.

### *Expected results*

- New international classifications and definitions of key concepts for digital media, information literacy and culture, produced in collaboration with partners and Member States.
- Strengthened cooperation with UNESCO programme sectors, Member States and partner agencies in identifying emerging policy information needs and developing internationally comparable indicators to monitor development targets concerning EFA, MDGs and the World Summit on the Information Society (WSIS).
- Improved international statistical classifications and standards in the areas of education, culture, communication, science and technology, including extensions and revisions to cover new policy interests in education, as well as communication, and operational guidelines to improve the collection of data on R&D, scientific innovation and education.
- Revised international statistical classifications published for culture and underway for education, resulting in increased clarity and transparency in international statistics, improved understanding of how the UIS processes national and international data, as well as more comparable, higher-quality data submission to the UIS.
- Up-to-date and efficient analytical methodologies applied and disseminated by the UIS in order to contribute directly to improving data availability and quality.



- Statistical standards issued by other agencies incorporating UIS classifications and standards, which will result in a more consistent international statistical forum, wider implementation of UIS standards in national statistical programmes and an increased amount of internationally comparable data on education, science, culture and communication.
- Development of new international statistical indicators to measure emerging policy issues and trends based on the needs of Member States and the international community.

### **Main programmatic line of action 3: Capacity building in the collection and use of statistics**

The use of statistics for evidence-based policy is dependent upon the availability of quality data, as well as the capacities of relevant government departments and agencies to analyse the data in the policy-making process. To improve the data collected by the UIS, it is thus necessary to work with countries on these areas. Effective national statistical capacity building efforts must focus on both training for individuals and institutional aspects of data collection and use. Technical assistance for national statisticians and planners has to be relevant to their immediate needs and sensitive to their circumstances, while addressing

the long-term sustainability of statistical production.

#### *Partnerships for capacity building*

The UIS will assist countries to improve their capacities for data collection, processing, quality control, analysis and dissemination through training and other forms of support. In addition, it will seek to deliver cost-effective assistance by working with central divisions of UNESCO – and more importantly with regional/cluster offices, UNESCO institutes and regional statistical entities. Such assistance will draw upon the UIS and partners' knowledge of the strengths and weaknesses of national statistical systems and will be closely linked to the application of appropriate methodologies, international statistical standards, pertinent indicators and cross-national analysis. The UIS regional network of statistical advisors will play an active role in all areas of this work.

In addition, a statistical capacity building strategy will be developed in cooperation with the UNESCO programme sectors and partner agencies. Active partnerships for national statistical capacity building in assessment of data quality, project identification and evaluation will be established with the relevant contacts. Resources permitting, the UIS will participate in supporting sector analysis and policy reforms

in multi-agency and multi-sectoral country assessment and programming (such as the “One UN Programming Framework”), with a particular focus on strengthening national statistical capacities in UNESCO’s fields of competence. The strategy will take account of the inter-agency initiative, Partnerships in Statistics for the 21<sup>st</sup> Century (PARIS21), to ensure that there is no inadvertent duplication of work.

In Africa, where challenges remain the greatest, the UIS will build stronger partnerships with regional networks and other relevant training institutions in order to promote and foster good practice in statistics. For education, key partners will be the ADEA Working Group on Education Statistics, the African Union and AFRISTAT. In science, the UIS will support the NEPAD AMCOST strategy to develop an observatory and statistical indicators; while in communication, it will support the UN Economic Commission for Africa in the

In Africa, where challenges remain the greatest, the UIS will build stronger partnerships with regional networks and training institutions in order to promote and foster good practice in statistics.

Partnership on Measuring ICTs for Development. UIS support at country level will usually be concentrated on advisory and technical assistance functions, while any required labour- or capital-intensive project will preferably be sub-contracted to entities presenting comparative advantage. In such cases, UIS capacity building support will mainly ensure quality assurance of project implementation so that internal standards are met.

Most important of all, given the significant need, the UIS will work in close partnership with other international and bilateral development agencies to ensure more consistent, multi-year and stable funding schemes for sustainable capacity building. The Institute will also work to raise the awareness of national policy- and decision-makers on the importance of statistics in UNESCO’s areas of interest and their linkages to other aspects of development, as well as national commitments to statistical capacity building.

### *Training*

Wherever possible, support for building statistical capacities through training will be provided either in the context of the regular UIS workshops or as an integrated part of a UNESCO-wide capacity building initiative. Institutes and other relevant regional training institutions will also serve as vehicles for these initiatives.

New statistical concepts, classifications, standards, norms and indicators, as well as the associated methodologies and best practices in national statistical activities, will be documented in operational guides and technical manuals. In addition to providing case studies and practical examples, some of these manuals may also outline alternative strategies and guidance to enable national statisticians to choose the right approach for their country. These will be widely disseminated for use in training and as references to aid production of national statistics and indicators. Statisticians will also receive training to produce their own codes of practice which, based on the United Nations Fundamental Principles of Official Statistics, will reinforce professional integrity in their work.

### *Expected results*

- A comprehensive UNESCO statistical capacity building strategy to provide the framework for developing activities in partnership with UNESCO sectors and development agencies.
- The assessment of information needs and statistical gaps and the development of data plans and incorporation of capacity building components into sectoral development projects related to UNESCO's main fields of action.
- Strengthened cooperation with other development agencies in the area of statistical capacity building.
- Technical guides and tools produced and disseminated for use in training and as reference tools for national statistical production.
- Improvements to national statistical systems.
- Reinforced networks of countries, experts and institutions for sharing experiences and best practices and for mutual help in statistical capacity building.

## **Main programmatic line of action 4: The monitoring and analysis of cross-national data**

Relevant and reliable statistics and indicators are essential to the development and formulation of sound policies, determining appropriate targets and monitoring progress. Very often data are under-utilized in decision-making processes. The UIS must play a catalytic role in developing innovative approaches to statistical analysis and spreading the practice of evidence-based policy-making by helping users to better interpret and utilize statistics. Such analyses will focus on data collected in UNESCO's fields of interest and their relationship to broader issues, such as poverty reduction and human development.

The UIS must play a catalytic role in developing innovative approaches to statistical analysis in its fields of interest and link their relationship to broader issues, such as poverty reduction and human development.

### *Promoting data use and interpretation*

Given the time and expense involved in collecting data, the UIS must ensure that their availability are exploited as fully as possible. The Institute will work in partnership with a wide range of other researchers and data users in order to analyse and interpret cross-national data. It will also produce key publications in order to provide initial data analysis and raise the profile of important data.

The UIS will aim to distribute a wider range of statistical material which reaches out to a variety of audiences and incorporates analysis, addressing international and national policy needs. It is anticipated that most of this statistical analysis will be conducted by the UIS in partnership with staff from other parts of UNESCO, namely sectors, institutes and field offices. It will be necessary to develop a programme of research and statistical analysis at the UIS and to build networks and partnerships with policy analysts and experts, within UNESCO as well as in research institutions and other regional and international organizations. A key goal is to develop analyses of the data in the UNESCO statistical database in relation to those from other sources to inform policy debates. Academic partners with particular expertise will be sought in relation to this work, and cooperation with the four universities based in Montreal can prove especially fruitful in this regard.

The UIS will work closely with national statisticians and researchers in order to help to analyse their data in a comparative context. The experience gained in the World Education Indicators (WEI) programme will reinforce these activities. The possibility of national statisticians undertaking research or internships at the UIS (funded by bursaries which might also enable them to study for a PhD at one of the Montreal universities) will also be explored, as will the possibility of an annual UIS summer school.

### *Publications and communications*

The UIS mandate includes professional advice and quality assurance of statistical data in key UNESCO publications across all sectors to ensure that UNESCO policy is based on sound international data. The Institute will collaborate in key international publications of other agencies by providing analysis derived from its databases. Furthermore, the UIS will issue its own reports to identify key issues to the international community.

Where appropriate, UIS contributions will include time series analysis and projections in order to inform policy-makers of anticipated trends and scenarios. These publications will be especially important in measuring progress towards MDGs, EFA, WSIS and other international targets.

The UIS will develop a communications strategy to try to ensure that its outputs are tailored to appropriate audiences and are disseminated as widely as possible.

### *Expected results*

- Maintaining and improving a UIS programme of research and analysis that promotes collaboration with UNESCO staff, research institutions and other organizations on policy issues.
- Systematic analysis of the quality of data from the UIS database – together with data from other sources, especially those from demographic censuses and surveys – and wide dissemination of the results in support of policy-making and monitoring of development.
- More relevant and reliable statistical indicators produced for and in an increasing number of countries to promote wider and more informed use of statistics among decisionmakers and civil society.
- Significant growth in analytical and statistical communication capacities among Member States and partner agencies and institutions.
- Improved national and international policy due to the use of more reliable data and analysis, informed decision-making and accountability.

## Monitoring Education for All (EFA)

The UIS is the lead agency responsible for the collection of data and indicators to monitor EFA goals and the education-related targets of the MDGs. It has the mandate to collect, analyse and disseminate up-to-date information on the state of education required by countries, regions and the international community to monitor progress towards the goals of Education for All. This work will be integrated within and contribute to regional monitoring and evaluation exercises, especially those building on mid-decade assessments.

At the World Education Forum in Dakar, governments and the international community recognized that education is a fundamental human right and collectively committed themselves to

An expected outcome of UNESCO's global coordination for Education for All is "progress towards EFA goals at the global, regional and country levels regularly monitored and used as input for evidence-based policies by Member States."

UNESCO 2008-2013 Medium-Term Strategy

"ensure that by 2015 all children, particularly girls, children in difficult circumstances and those belonging to ethnic minorities, have access to, and complete, free and compulsory primary education of good quality". Education policies are essential to achieve these goals. Monitoring systems are required to inform regularly whether the goals are achieved and to identify shortfalls and difficulties. The experience of the first ten years of the EFA programme highlighted many problems with data collection, analysis and dissemination of the statistics and indicators needed to monitor countries' progress towards achieving universal access to basic education. A rush to acquire data towards the end of the evaluation period is wasteful of resources, inefficient and of limited value.

The UIS role is two-fold: it must provide quality data while improving the monitoring of international education goals. The Institute has established the priority needs in terms of data and indicators and will continue to evaluate these. It ensures that these needs are met, to the greatest extent possible, by the regular UIS data collections. The identification of new indicators is carried out systematically in close collaboration with the EFA Global Monitoring Report team and partner agencies. Indeed, the UIS is the main source of data for the annual EFA Report.

Moreover, the Institute will continue to develop new indicators and comparative frameworks to measure more effectively progress towards EFA, as well as the education targets of the MDGs.

Regular assessment must be focused on helping governments to develop, review and amend national policies in order to ensure that the EFA goals are achieved in all countries as soon as possible. Statistical systems need to be strengthened to provide early warning of possible failure to attain the long-term targets. These issues extend across the Institute's four main lines of action. Effective EFA monitoring involves, for example, the assessment of learning outcomes – a key priority for at least two major UIS initiatives. Reinforced regionalized efforts to monitor education-related progress will be a cornerstone in the work of the UIS network of statistical advisors.



# UIS priorities for the period 2008-2013

Within the framework of the UIS main lines of action, the Institute has identified three key priorities for the next medium-term period:

- i) Improving the quality of data;
- ii) Reinforcing statistics and indicators on learning outcomes; and
- iii) Strengthening statistics in the areas of science, culture and communication.

## Priority No. 1: Improving the quality of data

Improving data quality has been a top priority since the founding of the UIS, and real progress has been made. However, many challenges remain as contexts change, new policy issues emerge and data needs continue to evolve. From standardizing data collection and processing procedures across the various UNESCO domains to strengthening links with Member States, the Institute is geared to provide improved quality data in terms of policy-relevance, scope, coverage, reliability, timeliness, comparability and other dimensions.

Data processing procedures have been consolidated across programme areas in order to achieve common standards in production activities and to develop and implement consistent institutional standards. The newly-formed UIS Data Processing

and Standards Unit will systematically monitor the quality of data processing and the implementation of common standards.

Data quality will also be improved through greater focus on outputs and use of data. This will involve:

- Consulting widely on the changing needs of policy-makers and planners;
- Developing comparative frameworks and indicators for these needs;
- Applying and refining international standards to improve comparability;
- Reviewing the design and providing guidance for UIS data collection instruments to increase consistency, ease and speed of use;

The UIS network of statistical advisors will be extended and strengthened across regions, especially in Africa. It will play a central role in improving data quality by linking producers and users of data at the country level.



- Strengthening the role of the UIS in analysing and interpreting data as a mechanism for improving quality. This will entail the analysis of a wide scope of data sources, including sample surveys and censuses; and
- Publishing guidelines to help Member States better understand the ways that national data are transformed by an international standard.

The analysis and interpretation of statistics can be seen as tools for improving data quality by identifying data gaps and inconsistencies, while encouraging appropriate use of indicators. Through consultations with data users, the UIS can better anticipate their needs.

The UIS network of statistical advisors will be extended and strengthened across regions, especially in Africa. It will play a central role in improving data

quality by linking producers and users of data at the country level. The network will coordinate improved technical assistance and advice for countries and will provide better feedback to the Montreal Headquarters for quality control of data and for assessing the statistical needs of Member States.

## **Priority No. 2: Reinforcing statistics and indicators on learning outcomes**

Learning outcomes reflect what people know and are able to do. They can reveal the extent to which education enables individuals and societies to pursue their potential. A number of international initiatives to assess learning outcomes have compared student achievement across countries to gain insight into the different contexts for learning.

The UIS is focusing on two main elements. The first involves promoting the measurement and analysis of adult functional literacy in Member States using the methodology of the Literacy Assessment and Monitoring Programme (LAMP). Second, the UIS will encourage, guide and assist Member States in the use of assessments to examine the effectiveness and equity of their education systems.

Literacy is essential for adult participation in work and society as a whole. In the context of EFA and MDGs, the assessment of adult literacy offers a way

“The quality of education is key to ensuring the success of learners. UNESCO will support Member States to improve educational quality through its work areas, such as content, curriculum, learning assessments and school management.”

to measure the sustainability of skills acquired in basic education and an essential skill for lifelong learning. The overall aim of LAMP is to improve the quality of literacy data – at the national level and international level for policy development and monitoring – and to improve literacy programmes.

The UIS will develop wider constituencies of support and adopt a partnership-based approach to LAMP, while concentrating on standard-setting, coordination and quality control rather than on implementation of field work. It will coordinate international and national partners in national and regional analyses of LAMP results and their policy implications. During 2008-2013, the UIS will assess the final outcomes in pilot countries and support its replication worldwide to establish LAMP as the standard measure of literacy.

The UIS role in the Assessment of Learning Outcomes (ALO) project will be to assess the current situation of school-based achievement measures. It will also focus on approaches for promoting the use and interpretation of measures of learning outcomes and education quality in Member States. The UIS will pursue the following main objectives:

- Develop a UNESCO-wide strategy as a clearinghouse for the measurement of learning outcomes;
- Develop partnerships with UN agencies, research institutes and other bodies involved in regional and international assessments;
- Develop comparative frameworks for quality measures and explore ways to statistically link data for cross-analysis of existing regional and international studies;
- Promote statistical analysis of national contexts within a regional or international framework, namely by working with national statisticians on the use of advanced statistical techniques to analyse assessment data; and
- Play an advisory role to Member States on measuring learning outcomes or participating in international studies of learning assessment.

The UIS will facilitate related partnerships, providing statistical expertise and helping Member States to make informed choices about participation in student assessment and the analysis of the results.

### Priority No. 3: Strengthening statistics in science, culture and communication

The UIS will assess critically the resources available to adequately fulfill the mandate of creating new frameworks (i.e. indicators, methodologies and standards) for data collection in science, culture and communication. There has been increased demand for the UIS to widen its support to these UNESCO programme areas. There is a growing consensus that these areas make a key contribution to development and that statistics are required to assess and measure their role. The UIS will ensure that these programmes have sufficient scale to take the lead in certain key activities. As these programme areas develop, the UIS will work closely with leading regional and national experts and institutions to ensure that it stays attuned to national and international needs.

“UNESCO will support Member States, notably in Africa, the least-developed countries and small island states, to develop their national science, technology and innovation policies and to build human and institutional capacities in the sciences. Among other measures, this will be achieved by benchmarking and monitoring trends in science, technology and innovation systems, in cooperation with UIS.”

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### Science

At the 2005 UN World Summit, Member States declared: “We recognise that science and technology, including information and communication technology, are vital for the achievement of the development goals and that international support can help developing countries to benefit from technological advancements and enhance their productive capacity”.

The UIS strategy will continue its current focus on the role of science and technology in development through R&D statistics. In 2008-2013, the UIS will develop this programme further by collecting data on innovation. Innovation measures are seen as an output of the R&D process and, therefore, have been identified as a priority by national, regional and international agencies. The UIS will act primarily as a clearinghouse for innovation survey questionnaires and metadata. At the same time, it will continue to conduct regional and sub-regional workshops, depending on resources, in order to provide countries with guidance on the development of national science systems.

### *Communication*

The UIS has responded to the World Summits on the Information Society (WSIS) in 2003 and 2005 by launching press and broadcast surveys and a module on information and communication technologies (ICTs) in education. It is a founding member of the Partnership on Measuring ICTs for Development, which was established as the official body for statistical monitoring of WSIS action plans. The UIS will pursue a data collection of international indicators on the role of ICTs in education as its agreed contribution to the Partnership. In addition to developing core indicators in this area, the UIS will pursue analysis of existing data sources, especially assessments to study ICT use in the classroom setting.

The ability of citizens to access information on public services, including health and education, is key to self-empowerment. UNESCO's Communication and Information (CI) sector has made public access to information a priority, notably through the Information for All programme. In response, the UIS will develop indicators that measure access to various information sources (newspapers, radio, television, Internet). This work will be integrated within the UIS press and broadcast media surveys. Although much emphasis is placed on the role of new technologies, traditional technologies and media

(newspaper, radio and television) also make a very important contribution to education in developing countries, while informing citizens about the availability of government services and public information.

Clearly the availability of public information does not ensure that people have the skills to read or use these resources. Literacy is a prerequisite to access many information sources. Tests of information literacy are increasingly being introduced in universities, libraries and other education institutions. The UIS will work closely with UNESCO CI sector in developing indicators and standards to measure these skills and information usage. In addition, LAMP will provide data on the presence of information resources in the home. By 2013, the UIS will produce a comprehensive set of definitions and indicators for information literacy. A specific focus will be the growing influence of on-line media, such as Internet newspapers and radio.

The UIS will need to secure sufficient resources to enable regular data collections in this area to meet the needs of Member States and the international community. Consultation with these groups will enable the identification of the most pertinent indicators that can be captured through existing or refined data collection instruments.

## Culture

There has been growing demand for indicators on culture, especially in light of the ratification in 2006-2007 of the UNESCO conventions on intangible heritage and expressions of cultural diversity, as well as the review of the 'periodic' reporting system for World Heritage sites and the preparation of the *World Report on Culture*. The UK Commission for Africa and UNESCO have stressed the need for data that demonstrate how culture can contribute to development. The UIS is responding by revising the 1986 *UNESCO Framework for Cultural Statistics* which should be presented to the General Conference in 2009. This important tool will enable Member States to measure the place of cultural activities in their societies by compiling data from existing sources, such as national censuses and labour force surveys.

“In strengthening the contribution of culture to sustainable development, UNESCO will pursue the development of demonstration tools through more systematic collection of cultural statistics, inventories, and national and regional ‘mapping’ of cultural resources.”

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After developing the new statistical framework, the UIS will explore the potential to collect data in other areas of culture, such as the number of people working in culture-related occupations. Further guidance will be issued on how cultural statistics can include the informal sector of the economy, traditional crafts and social activities within a cultural context.

The UIS will also consider surveys on particular cultural industries or social trends, if extra-budgetary resources are available. Potential sectors include cinema, libraries, music and design. The Institute will work in close cooperation with the appropriate professional bodies to determine definitions and indicators. Data collected under this programme will contribute to the measurement of progress in implementing the Convention on the Protection and Promotion of the Diversity of Cultural Expressions.

The UIS strategy in the area of science, culture and communication will be taken forward by:

- Working with partners to establish a consensus on new classifications and standards, especially in the field of culture;
- Developing regular data collection programmes in the fields of culture and communication; and
- In the field of science, introducing a programme of work on innovation indicators and science in education.

# Human, financial and material resources

## Human resources management

The UIS relocated to Montreal in 2001 with nine staff members. During its first four years (2001-2005), the Institute grew to 25 staff and focused on diversifying its programmes and projects. Today, the UIS has approximately 90 staff members employed, including temporary and contractual staff in the field. In March 2007, the Institute was restructured into four programme units:

- Administration, including human and financial resource management;
- Education Indicators and Data Analysis (UIS/EIDA);
- Adult Education-Science-Culture and Communication (UIS/AESC), Statistical Capacity Building Programme (SCB) and Literacy Assessment and Monitoring Programme (LAMP); and
- Data Processing and Standards Unit (UIS/DPS), encompassing I.T. support and data processing.

The UIS will implement a strategic training plan for development of staff skills.

This new organization will be reviewed on a regular basis and reassessed during the first half of the next six-year period.

Once the transition process is fully completed, the next goal will be to align the Institute's operational goals with Human Resources Planning and Development. By the end of 2007, the UIS will adopt the new UNESCO objectives-based, on-line performance evaluation system, PerfoWeb. The use of PerfoWeb will help to establish yearly work plans and to coach, as well as evaluate, staff members.

The comprehensive use of results-based management will allow the creation of a strategic training plan that will relate skills development to the needs of both individuals and the organization as a whole. The training plan will begin by introducing general training topics to staff concerning information technology, management, presentation and writing skills, as well as time management. This will then be followed by more specialized topics in the area of statistics and data analysis.

At the end of 2007, the integrated HR/payroll system, STEPS, is expected to be implemented for all Category I Institutes. This will link human resources to established work plans and approved budgets.


To fully implement the 2008-2013 Medium-Term Strategy, the Institute will need to increase the number of staff by an additional 20 to 25 people. Additional funding will be needed for this growth. The Institute will also focus on new ways of expanding human resources through, for example, secondment, the associate experts scheme, collaboration with universities and internships.

The Institute is now well established on the premises of the *Université de Montréal* campus with additional office space financed by the Governments of Canada and Quebec through *Montréal International*. Reinforcement of the UN security measures is currently being undertaken in order to be more properly aligned with the general security requirements for UN organizations.

### Financial resources

The UIS has full financial autonomy and operates its resources within a special account set up by the Director-General of UNESCO with the endorsement of the UNESCO Executive Board.

The UIS has a mandate to respond to the data needs of the international community at large. To accomplish this, it seeks to draw extra-budgetary resources to supplement the regular financing



The UIS has found that multi-year funding arrangements are the most effective and efficient means to pursue core programme activities.

that is received from UNESCO. For the first Medium-Term Strategy of 2002-2007, the Institute benefited from UNESCO contributions amounting to US\$ 24.8 million and also received US\$ 25 million in voluntary contributions from Member States and international organizations.

For the 2008-2013 Medium-Term Strategy, the UIS will be focusing on three priorities: i) improving the quality of its data; ii) strengthening statistics and indicators on learning outcomes; and iii) reinforcing statistics in fields other than education. The changes and new initiatives will require additional commitment and funding. It is estimated that the UIS annual budget will have to increase from the current amount of approximately US\$ 9 million to at least US\$ 12 million. It is expected that UNESCO will continue to provide about US\$ 4.5 million per year, as is currently the case.

Therefore, the UIS is seeking to maintain or possibly expand existing agreements with current donors, while pursuing new sources of funding from other organizations and governments. Indeed, the UIS greatly appreciates the generous support of its diverse donors and partners. The next logical step lies in developing financial partnerships with these organizations rather than simply seeking project funding.

The UIS has found that multi-year funding arrangements are the most effective and efficient means to pursue core programme activities. In addition, the UIS will, at times, bid for extra-budgetary funding to cover expenses on particular projects, such as LAMP. It is acknowledged that the Institute must show responsiveness to new demands from major clients and stakeholders. When seeking extra-budgetary funding, it is important to confirm that these agreements cover 100% of the project costs. This will ensure that the project is self-sustaining and does not redirect resources away from the core priorities identified in this strategy. It is our belief that the UIS will better serve the needs of Member States and the international community by remaining focused on its core role and functions rather than being distracted by short-term goals.



# Priorities by main line of action and sector

		Education	Science	Communication	Culture
1.	<b>Guardianship of cross-national data</b>	Improve key aspects of data quality (relevance, completeness, timeliness) through the data production and dissemination cycles.	Improve quality of data through guidance and support to countries, in partnership with national and regional agencies.	Improve quality of data through comparison with other data sources, consulting with Member States, effective data processing.	Introduce international collection of culture data based on revised UNESCO framework.
2.	<b>New methodologies and indicators</b>	Develop new comparative frameworks that address emerging policy issues, especially in adult literacy and student achievement, and that contribute to improved data quality; maintain international standards for classification and support their application in Member States.	Pursue the measurement of the contribution of human resources to advances in science and technology by introducing new statistical approaches to innovation and science education in collaboration with experts, international agencies and Member States.	Develop a statistical framework to measure use of traditional and new technology in accessing public information as an initiative under the UNESCO Information for All programme.	Work with experts and Member States to issue revised UNESCO framework for cultural statistics that will provide guidance to Member States on the measurement of culture's contribution to social and economic development.
3.	<b>Capacity building</b>	Help to develop capacity in Member States across the various mainline activities of the UIS – collecting and processing data and turning data into information which can be used for policy-making.	Address the statistical needs of Member States with regional workshops and missions to key countries, in collaboration with UNESCO policy specialists, science experts and other partners.	Assess the gaps in current data and the needs of Member States, putting in place a programme of activities to address priority issues.	Develop guidance for Member States on the implementation of the revised framework and identify key agencies and countries which place a priority on culture data.
4.	<b>Analysis/ outputs</b>	Promote data use and interpretation through outputs, such as the <i>Global Education Digest</i> , thematic and regional reports. Offer new data tools and products tailored to the needs of policy-makers.	Issue quality data and publications on R&D and other science data.	Promote the use of UIS data amongst a wide range of users, including governments, academics and specialised agencies.	Provide supporting data to key reports on cultural issues by UNESCO and other agencies.



**UNESCO Institute for Statistics**

P.O. Box 6128, Succursale Centre-Ville  
Montreal, Quebec H3C 3J7  
Canada

Tel: (1 514) 343-6880

Fax: (1 514) 343-5740

Email: [information@uis.unesco.org](mailto:information@uis.unesco.org)

<http://www.uis.unesco.org>



**UNESCO Institute for Statistics**

P.O. Box 6128, Succursale Centre-Ville

Montreal, Quebec H3C 3J7

Canada

<http://www.uis.unesco.org>

The UNESCO Institute for Statistics (UIS) is the statistical office of the United Nations Educational, Scientific and Cultural Organization (UNESCO) and is the UN depository for internationally comparable statistics in the fields of education, science and technology, and culture and communication.